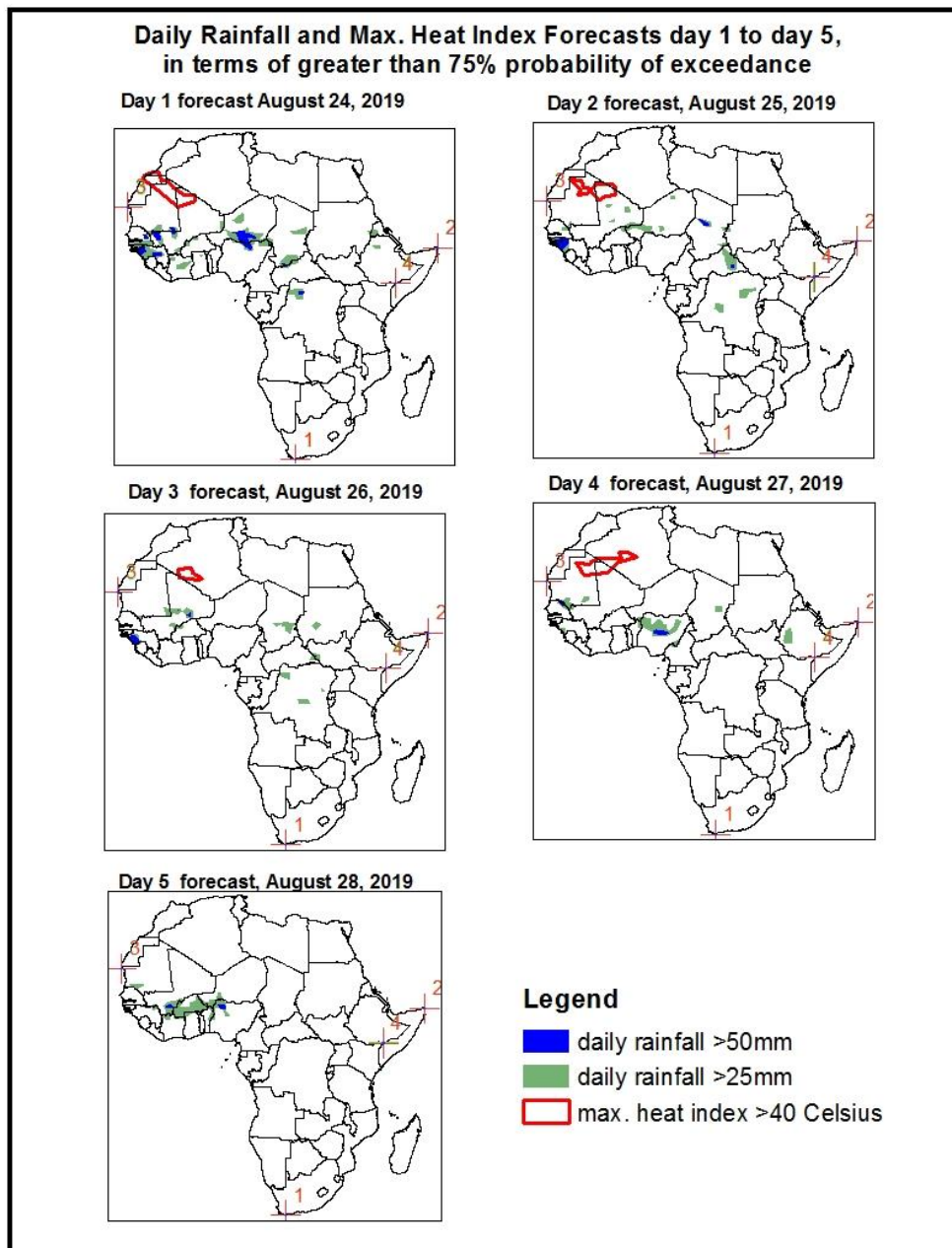


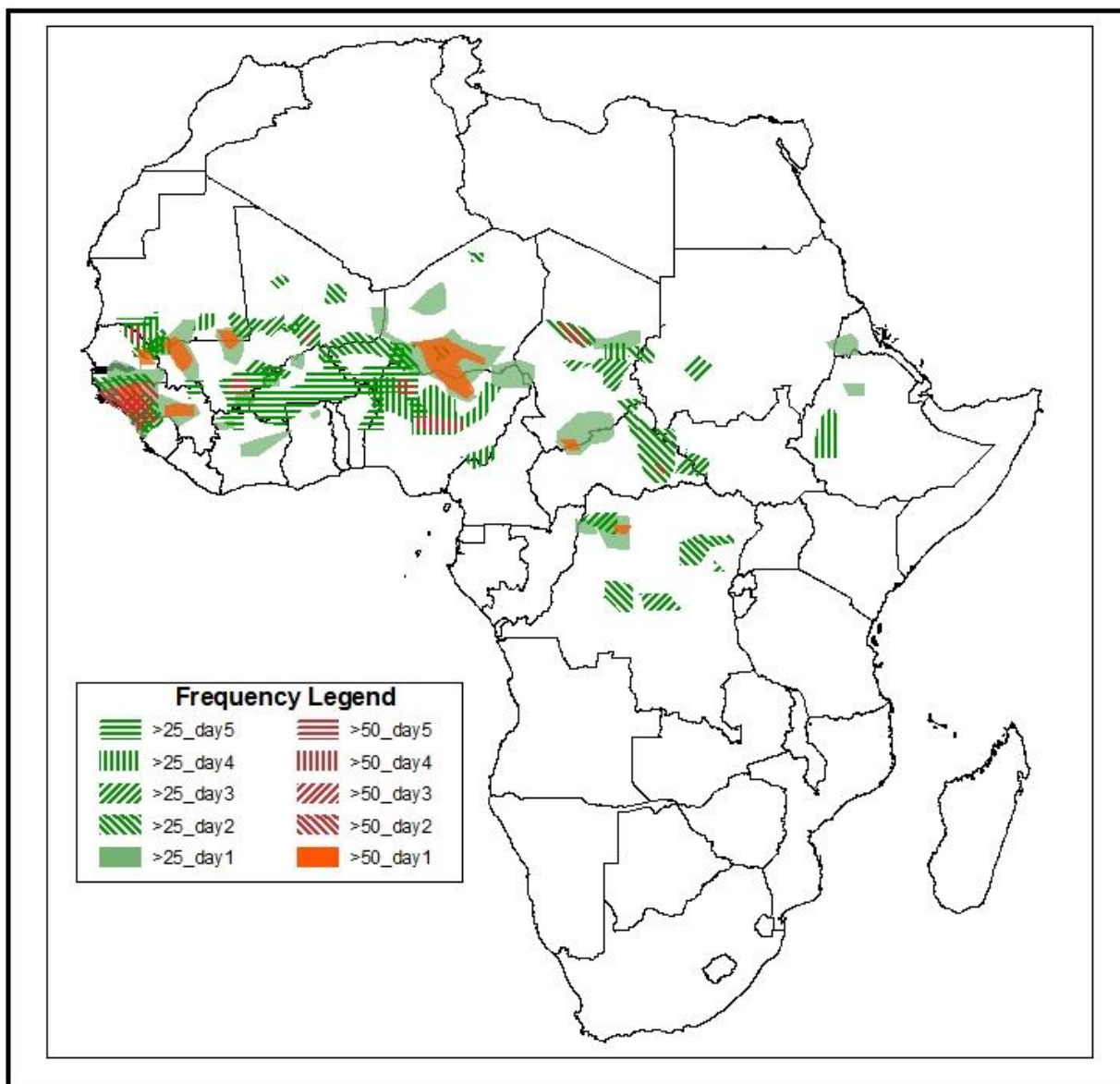
**1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on August 23, 2019)**

**1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 24 – 28 August, 2019)**

The forecasts are expressed in terms of high probability of precipitation (POP), valid 06Z to 06Z, and exceedance probability of maximum heat index (>40°C), based on the NCEP/GFS and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



## Five Days Rainfall Forecast Summary 24 - 28 August, 2019

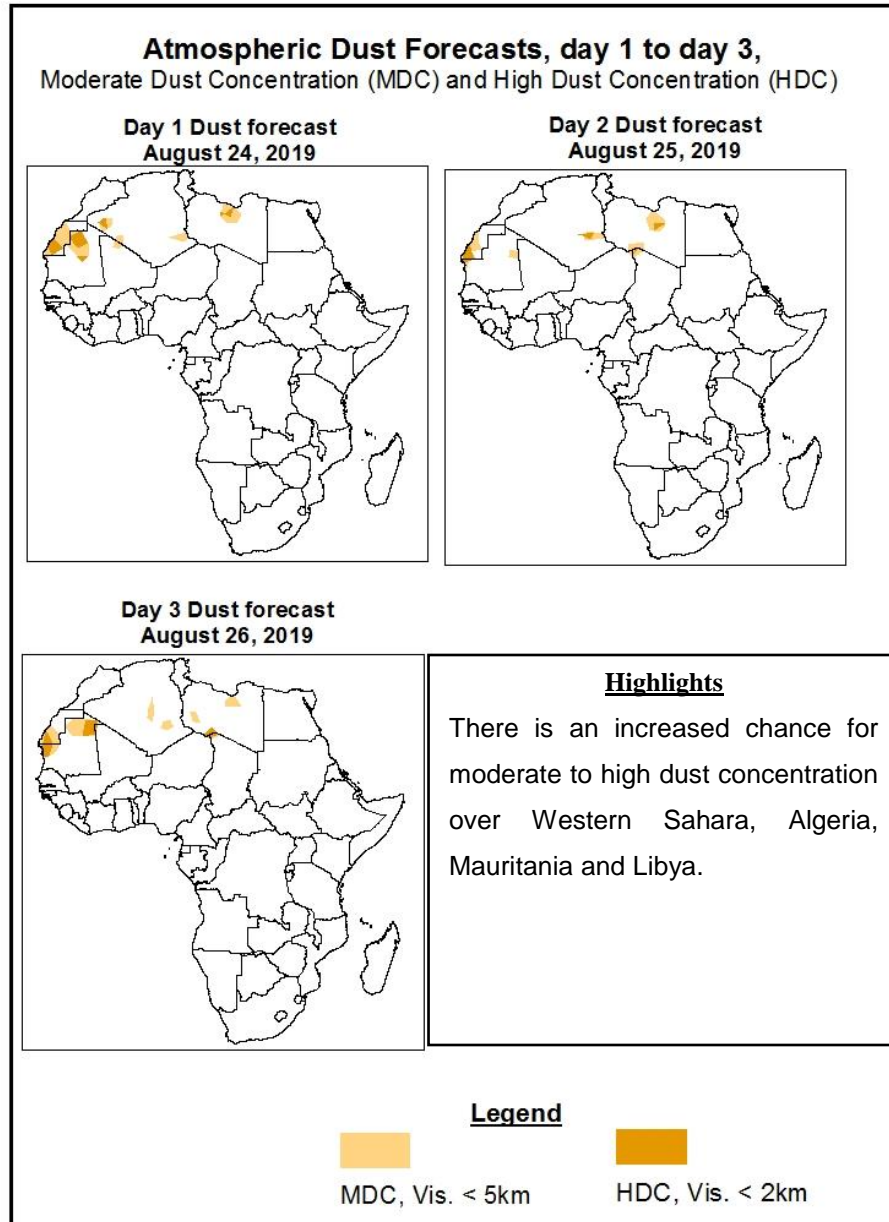


### Highlights

- The monsoon flow from the Atlantic Ocean with its associated lower-level convergence, and westward propagating meso-scale convective systems are expected to enhance rainfall over Western Africa, portions of the Sahel and Central Africa countries.
- At least 25mm for two or more days is likely over some countries Western Africa, portions of the Sahel and Central Africa. There is an increased chance for daily rainfall to exceed 50mm over portions of Guinea, East of Senegal, Southwest of Mali, South of Niger, South of Chad, Center of Nigeria and North of RDC.
- There is an increased chance for daily maximum heat index to exceed 40°C over Algeria, Mali and Mauritania.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: 24 – 26 August 2019)

The forecasts are expressed in terms of high probability of dust concentration, based on the Navy Aerosol Analysis and Prediction System, NCEP/GFS lower-level wind forecasts and expert assessment.



### **1.3. Model Discussion, Valid: 24 – 28 August 2019**

The Azores High Pressure system over the Northeast Atlantic is expected to weaken with its central pressure value decreasing from 1025hPa to 1021hPa during the forecast period.

The St. Helena High Pressure system over Southeast Atlantic Ocean is expected to strengthen with its central pressure value increasing from 1036hPa to 1040hPa during the forecast period.

The Mascarene High Pressure system over Southwest Indian Ocean is expected to strengthen with its central pressure value increasing from 1029hPa to 1030hPa during the forecast period.

Thermal low across the Sahel region is expected to remain quasi stationary with its central pressure value about 1006 hPa, with a slightly strengthen to 1007 hPa at the end of forecast period.

At 925-hPa level, strong dry northerly to northeasterly flow is expected to prevail across Northwest Africa. In contrast, moist southwesterly flow from the Atlantic Ocean is expected to prevail across the Gulf of Guinea and the Sahel regions, and the neighboring areas of Central Africa.

At 850-hPa, lower-level wind convergences are expected to remain active over portions of the Sahel Central Africa and Lake Victoria regions. An area of cyclonic circulation is over Western Africa during the forecast period.

At 700-hPa, a broad area of anticyclonic flow is expected to prevail and intensify across much of Northwest and West Africa during the forecast period.

At 500-hpa, wind speed associated with easterly flow is expected to exceed 30kts over local areas in the Sahel region and Greater Horn of Africa during the forecast period.

The monsoon flow from the Atlantic Ocean with its associated lower-level convergence, and westward propagating meso-scale convective systems are expected to enhance rainfall over Western Africa, portions of the Sahel and Central Africa countries. At least 25mm for two or more days is likely over some countries Western Africa, portions of the Sahel and Central Africa. There is an increased chance for daily rainfall to exceed 50mm over portions of Guinea, East of Senegal, Southwest of Mali, South of Niger, South of Chad, Center of Nigeria and North of RDC. There is an increased chance for daily maximum heat index to exceed 40oC over Algeria, Mali and Mauritania.

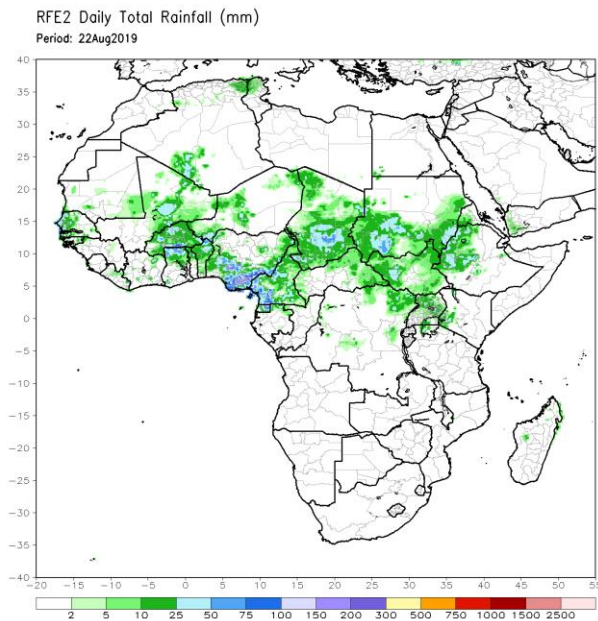
## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (August 22, 2019)

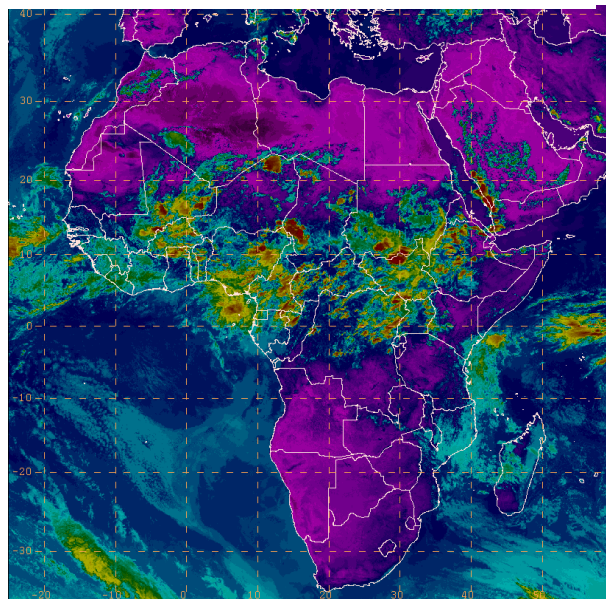
Daily rainfall amount exceeded 25mm over South of Niger, West of Senegal and Gambia, North of Ghana, Center of Mali, North of Benin, South of Nigeria, Southwest of Cameroon, Center of Chad, Southwest and East of Sudan and Northeast Ethiopia exceeded 50mm over South Nigeria, Southwest of Cameroon, Central of Chad and South of Sudan.

### 2.2. Weather assessment for the current day (August 23, 2019)

Deep convective clouds are observed over portions of the Sahel, Central Africa and some portions of the Greater Horn of Africa.



IR Satellite Image (valid 1352 August 23, 2019)



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